REMARKS

Reconsideration and allowance of the claims pending in the subjected are requested based on Remarks, as follows:

I. STATUS OF THE CLAIMS:

Claims 17 - 29 are pending in the application.

Claims 17, 19 and 24 are objected to based on informalities.

Claims 24-29 are allowed.

Claims 17, 18 and 20-23 are rejected under 35 USC 103 (a) as unpatentable over USP 4,424038 to P. Tingleff et al, issued June 3, 1984, filed January 31, 1980 (Hereafter, Tingleff) in view of USP 6,184,816 to L.L. Zeng et al, issued February 6, 2001, filed July 6, 1999 (Hereafter, Zeng).

Claim 19 is further objected to as dependent upon a rejected claim, but would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claim. Claim 19 has been canceled and combined with claim 17 as New Claim 30.

Claim 23 is objected to as dependent upon a rejected claim, but would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claim. Claim 23 has been canceled and combined with claim 17 as New Claim 31.

II. RESPONSE TO THE CLAIM OBJECTION:

Applicants have amended claims 17, 19 and 24 to change the term "capable of" to the term "is capable of", as suggested by the Examiner to overcome the objection.

Withdrawal of the objection of claims 17, 19 and 24 is requested.

III. RESPONSE TO THE CLAIM REJECTIONS- 35 USC 103:

Applicants' respond to the indicated Paragraph of the rejection, as follows:

Paragraphs 2/3:

Claims 17-18 and 20-22 include elements not disclosed or suggested in Tingleff in view of Zeng and over come the rejection under 35 USC 103 (a), as follows:

Tingleff describes a radar warning receiver training system as a simulator, which is a plug compatible unit with a radar warning system already existing in a combat aircraft. The unit comprises (1) a data processing system 10 including a scenario memory 14 and a processor 15; (2) an inertial guidance unit 11 and (3) a display driver and interface unit contained within a single housing and mounted in the aircraft. During a training flight taken by the aircraft, according to a training scenario stored in the memory 14, signals are read out from the inertial guidance unit 11 and processed by the processor 15 for storage in the memory 14. Subsequent to the training flight, the plug capable unit is taken out of the aircraft. The flight data stored in the scenario memory 14 is read out and analyzed to provide information to the pilot as to the particular maneuvers and flight path taken in the training flight to sharpen the pilot's combat skills. See Tingleff at column 9, lines 28-45.

Tingleff describes an in-flight training simulator and not an on the ground flight simulator. Google's On Line Dictionary describes a flight simulator "as a machine on the ground that simulates the conditions of flying a plane." Applicants' on the ground simulator is described in applicants' specification at page 2, lines 3 – 23 and further detailed at page 4, line 26 continuing to page 5, 29. Applicants' simulator, shown in applicants' Figure 1, discloses software modules 4-8 and 11 under the control of software modules 1-3 for imitating flight performance of an aircraft while in an on the ground environment. Simulator modules 9 and 10 simulate vortex conditions encountered in flight by an aircraft.

Tingleff's radar warning receiver training simulator does not include software modules for imitating flight conditions while on the ground. The simulator, a plug compatible unit, is installed in a combat aircraft and exercised under real time flight conditions directed by a training scenario stored in the unit. The data processing unit; inertial guidance unit and display

and driver unit of Tingleff's simulator do not describe or suggest applicants' software modules recited in claims 17, 20 and 22 for imitating flight conditions. The plug compatible unit and associated aircraft units initiate and record actual flight conditions and do not imitate flight conditions as performed by applicants' software modules.

Tingleff discloses the pilot's actions are recorded for subsequent analysis. Tingleff does not describe estimating correctness of pilot actions against flight situations on the basis of receiving information from modules 4 and 5, as described in applicants' specification at page 5, lines 26-29

Applicants have not found nor has the Examiner identified any module in Tingleff for commutating simulator modules as described in applicants' specification at page 10, lines 14-27

Summarizing, Tingleff does not describe or suggest (1) simulator modules for imitating flight conditions in an on the ground environment; (2) a simulator module for evaluating a pilot's actions based on information received from other simulator module, and (3) simulator modules for providing a pilot a choice of training scenarios.

Zeng describes an in-flight clear air turbulence (CAT) detection system to detect CAT along the flight path of an aircraft. The aircraft stores coarse simulation information and utilizes the information to perform large scale weather modeling over a large grid. On board sensors are utilized to generate observational information to model atmospheric conditions within a small grid, nested within a larger grid along the flight path of the aircraft. A now cast predicting turbulence along the flight path in the near future alerts the pilot to the likelihood of encountering clear air turbulence. A data link may be utilized to receive coarse simulation data or observational data from sources external to the aircraft. The coarse simulation information may include turbulence forecast data and the observational information used to refine the turbulence forecast to more accurately predict clear air turbulence along the flight path of the aircraft.

Zeng predicts possible in flight vortex conditions for a pilot based on uplink and local weather observations. Zeng does not provide software modules simulating vortex conditions for a flight simulator.

Zeng discloses a CAT now cast avoidance system to divert from or avoid vortex condition based on predictions from uplink and local weather information, as described in Zeng at column 6, lines 10-26. There is no disclosure or suggestion in Zeng of simulating wake vortex perturbation effects in a flight simulator. Zeng provides modified flight paths to avoid wake effects in actual flight conditions.

There is no disclosure or suggestion in Zeng nor has the Examiner identified in Zeng applicants' flight simulating modules 1-8 and 11, which are missing in Tingleff.

Summarizing Tingleff and Zeng, alone or in combination, fail to disclose or suggest a flight simulator with (1) software modules imitating flight condition under vortex situations; (2) software modules for evaluating a pilot's action under the flight conditions, and (3) software modules simulating vortex situations and vortex perturbation effects on an aircraft.

The rejection of claims 17-18 and 20-22 under 35 USC 103 (a) based on Tingleff in view of Zeng is without support in the cited art based on the failure of the cited art to describe or suggest the claimed subject matter indicated above. Withdrawal of the rejection and allowance of claims 17-18 and 20-22 are requested.

Paragraph 4/5:

Claims 19 and 23 have been canceled and combined with claim 17 as New Claims 30 and 31, respectively describing allowable subject matter.

Paragraph 6:

Applicants have reviewed US PAP 20010041326 entitled "In-flight aircraft training system" and find no disclosure in the publication related to the elements described in the claimed subject matter.

CONCLUSION

Based on the foregoing amendments and remarks, Applicants respectfully request reconsideration and withdrawal of the rejection of claims and allowance of this application.

AUTHORIZATION

The Commissioner is hereby authorized to charge any additional fees which may be required for consideration of this Amendment to Deposit Account No. **13-4500**, Order No. 5106-0002.

In the event that an extension of time is required, or which may be required in addition to that requested in a petition for an extension of time, the Commissioner is requested to grant a petition for that extension of time which is required to make this response timely and is hereby authorized to charge any fee for such an extension of time or credit any overpayment for an extension of time to Deposit Account No. **13-4500**, Order No. 5106-0002.

Respectfully submitted,
MORGAN & FINNEGAN, L.L.P.

Dated: October 2, 2008

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